This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Mammalian target of rapamycin (mTOR; FRAP; RAFT1)	Studies in patient samples suggest mTOR inhibitors could help treat patients harboring activating mutations in *mTOR*. In a Phase I study of Afinitor everolimus plus Votrient pazopanib, 1 patient with bladder cancer who had a 14-month complete response was found to carry 2 concurrent activating mutations in *mTOR*. In a separate analysis of publically available genomic data, a series of activating mutations in *mTOR* were identified. In mouse xenograft models of cancer, tumors carrying the activating *mTOR* mutations were hypersensitive to rapamycin. Next steps could include screening for and incorporating patients with *mTOR*-activating mutations in clinical trials that evaluate mTOR inhibitors. Afinitor, an oral mTOR inhibitor from Novartis AG, is marketed to treat brain cancer, breast cancer and neuroendocrine tumors. Pfizer Inc. markets Torisel temsirolimus, an i.v. mTOR inhibitor, to treat renal cancer and mantle cell lymphoma (MCL). GlaxoSmithKline plc markets the VEGF inhibitor Votrient to treat renal cell carcinoma (RCC) and advanced soft tissue sarcomas. *SciBX* 7(12); doi:10.1038/scibx.2014.339 Published online March 27, 2014	Patent and licensing status unavailable for findings in both studies	Wagle, N. *et al. Cancer Discov.*; published online March 13, 2014; doi:10.1158/2159-8290.CD-13-0353 **Contact:** Jonathan E. Rosenberg, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: rosenbj1@mskcc.org **Contact:** Levi A. Garraway, Dana-Farber Cancer Institute, Boston, Mass. e-mail: levi_garraway@dfci.harvard.edu Grabiner, B.C. *et al. Cancer Discov.*; published online March 14, 2014; doi:10.1158/2159-8290.CD-13-0929 **Contact:** David M. Sabatini, Whitehead Institute for Biomedical Research, Cambridge, Mass. e-mail: sabatini@wi.mit.edu